

1 **C. AMENDMENTS TO THE CLAIMS AND LISTING OF ALL CLAIMS**
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3 **Listing of Claims:**

4 Claim 1 (currently amended)

5 Claim 2 (currently amended)

6 Claim 3 (currently amended)

7 Claim 4 (currently amended)

8 Claim 5 (currently amended)

9 Claim 6 (currently amended)

10 Claim 7 (currently amended)

11 Claim 8 (currently amended)

12 Claim 9 (currently amended)

13 Claim 10 (new)

1 **C. AMENDMENTS TO THE CLAIMS**

2
3 **Claim 1 (currently amended)** Spring mechanisms mechanism
4 assemblies which facilitate the movement of a for trailer ramp doors
5 door, adapted to be completely enclosed in slots formed in
6 rectangular tubular side members of a trailer rear entrance frame and
7 having spring mechanisms that are completely protected from weather
8 elements when said trailer ramp door is closed, comprising:

9 a pair of elastic spring means ~~springs~~ each having a top end and
10 a bottom end, said elastic spring means providing dampening of the
11 downward movement of said trailer ramp door and providing lifting
12 assistance for the upward movement of said trailer ramp door ;

13 a pair of side members of a trailer rear entrance frame to which
14 said trailer ramp door is attached, said pair of side members each
15 having openings formed on each of their top surfaces, each of said
16 openings formed to receive each of said elastic spring means and
17 formed to completely enclose each of said elastic spring means in
18 conjunction with said trailer ramp door when said trailer ramp door
19 is closed;

20 means for securely attaching each said top end of each of said
21 elastic spring means separately inside each of said openings ~~slot~~
22 ~~formed in each of two side members of a trailer rear entrance frame;~~
23 and

24 means for securely attaching each said bottom end of each of said
25 elastic spring means separately to the inner surface of each of two
26 flange members, each flange member being formed from and extending
27 outwardly from each side of said trailer ramp door; of two side
28 ~~members of a ramp door frame; whereby closing a trailer~~

1 ~~ramp door inserts each of said springs into each of said slots while~~
2 ~~each of said flange members completely encloses each of said springs~~
3 ~~in each of said slots.~~

4 whereby said elastic spring means facilitate both the opening of
5 said trailer ramp door and the closing of said trailer ramp door, and
6 said closing of said trailer ramp door inserts each of said
7 elastic spring means into each of said openings and simultaneously
8 causes each of said flange members to completely cover each of said
9 elastic spring means while inserted in each of said openings, thereby
10 completely enclosing each of said elastic spring means in each of
11 said openings and providing complete protection of said elastic
12 spring means from weather elements.

1 C. AMENDMENTS TO THE CLAIMS - CONTINUED

2
3 Claim 2 (currently amended) Spring mechanisms as defined in Claim
4 1, in which said means for securely attaching each said top end
5 comprises:

6 a pair of yoke members each of which securely holds each of said
7 top ends of said elastic spring means ~~springs~~, each of said yoke
8 members being inserted into one of said openings ~~slots~~ and securely
9 attached to the inner surface of one of said side members of said
10 ~~tubular rectangular~~ trailer rear entrance frame.

1 **C. AMENDMENTS TO THE CLAIMS - CONTINUED**

2 **Claim 3 (currently amended)** Spring mechanisms as defined in Claim
3 1, in which said means for securely attaching each said bottom end
4 comprises:

5 a pair of yoke members each of which securely holds one of said
6 bottom ends of said elastic spring means springs, each of said yoke
7 members being securely attached at its bottom to the inner surface of
8 one of said flange members.

1 C. AMENDMENTS TO THE CLAIMS - CONTINUED

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3 **Claim 4 (currently amended)** A spring mechanism assembly which
4 facilitates the movement of ~~for~~ a trailer ramp door, ~~adapted to be~~
5 ~~completely enclosed in a slot formed in a rectangular tubular side~~
6 ~~member of a trailer rear entrance frame and having a spring mechanism~~
7 that is completely protected from weather elements when said trailer
8 ramp door is closed, comprising:

9 [[a]] an elastic spring means having a top end and a bottom end,
10 said elastic spring means providing dampening of the downward
11 movement of said trailer ramp door and providing lifting assistance
12 for the upward movement of said trailer ramp door;

13 a side member of a trailer rear entrance frame to which said
14 trailer ramp door is attached, said side member having an opening
15 formed on its top surface formed to receive said elastic spring means
16 and formed to completely enclose said elastic spring means in
17 conjunction with said trailer ramp door when said trailer ramp door
18 is closed;

19 means for securely attaching said top end of said elastic spring
20 means inside said opening slot ~~formed in a side member of a trailer~~
21 ~~rear entrance frame, and~~

22 means for securely attaching said bottom end of said elastic
23 spring means to the inner surface of a flange member formed from and
24 extending outwardly from a side member of [[a]] said trailer ramp
25 door frame; whereby closing a trailer ramp door results in inserting
26 ~~said spring into said slot and said flange member completely~~
27 ~~encloses said spring in said slot.~~

1 whereby said elastic spring means facilitates both the opening
2 of said trailer ramp door and the closing of said trailer ramp door,
3 and said closing of said trailer ramp door inserts said elastic
4 spring means into said opening and simultaneously causes said flange
5 member to completely cover said elastic spring means while said
6 elastic spring means is in said opening, thereby completely
7 enclosing said elastic spring means in said opening and providing
8 complete protection of said elastic spring means from weather
9 elements.

1 **C. AMENDMENTS TO THE CLAIMS - CONTINUED**
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3 **Claim 5 (currently amended)** A spring mechanism assembly as
4 defined in Claim 4, in which said means for securely attaching said
5 top end of said elastic spring means comprises:

6 a yoke member which securely holds said top end of said elastic
7 spring means, said yoke member being inserted into said opening slot
8 and securely attached to the inner surface of said side member of
9 said tubular rectangular trailer rear entrance frame.
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1 **C. AMENDMENTS TO THE CLAIMS - CONTINUED**

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3 **Claim 6 (currently amended)** A spring mechanism assembly as
4 defined in Claim 4, in which said means for securely attaching said
5 bottom end of said elastic spring means comprises:

6 a yoke member which securely holds said bottom end of said
7 elastic spring means, said yoke member being securely attached at its
8 bottom to said inner surface of said flange member.

1 C. AMENDMENTS TO THE CLAIMS - CONTINUED

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3 **Claim 7 (currently amended)** A spring mechanism assembly which
4 facilitates the movement of ~~for~~ a trailer ramp door, and having a
5 spring mechanism that is completely protected from weather elements
6 when said trailer ramp door is closed ~~adapted to be completely~~
7 enclosed when said trailer ramp door is closed, comprising:

8 [[a]] an elastic spring means having a top end and a bottom end
9 and an effective tensile strength and an effective load capacity
10 sufficient to facilitate movement of said trailer ramp door by
11 providing dampening of downward movement of said trailer ramp door
12 and providing lifting assistance for upward movement of said trailer
13 ramp door;

14 a longitudinal flange member formed from and extending along a
15 side of a trailer ramp frame and ~~affixed thereto~~ to which said
16 trailer ramp door is affixed ;

17 means for securely attaching the bottom end of said elastic
18 spring means to the inner surface of said longitudinal flange member;

19 a side member of a trailer rear entrance frame having
20 a longitudinal opening ~~formed on~~ ~~located at~~ the outer surface of
21 [[a]] said side member of a ~~tubular rectangular~~ trailer rear entrance
22 frame, said longitudinal opening formed to receive the entire length
23 of said elastic spring means and formed to be closed and to
24 completely enclose said elastic spring means in conjunction with ~~by~~
25 said longitudinal flange member when said trailer ramp door is
26 closed;

27 means for securely attaching the top end of said elastic spring
28 means ~~through~~ ~~inside~~ said longitudinal opening to the inner surface

1 of said side member; ~~whereby closing said trailer ramp door~~
2 ~~completely encloses said spring.~~

3 whereby said elastic spring means facilitates both the opening
4 of said trailer ramp door and the closing of said trailer ramp door,
5 and said closing of said trailer ramp door inserts said elastic
6 spring means into said longitudinal opening and simultaneously causes
7 said flange member to completely cover said elastic spring means
8 while said elastic spring means is in said longitudinal opening,
9 thereby completely enclosing said elastic spring means in said
10 longitudinal opening and providing complete protection of said
11 elastic spring means from weather elements.

1 **C. AMENDMENTS TO THE CLAIMS - CONTINUED**
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3 **Claim 8 (currently amended)** A spring mechanism assembly as
4 defined in claim 7, in which said means for securely attaching said
5 bottom end of said elastic spring means comprises:

6 a yoke assembly securely holding said bottom end of said elastic
7 spring means, said yoke assembly being securely attached at its
8 bottom to said inner surface of said longitudinal flange member.
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1 **C. AMENDMENTS TO THE CLAIMS - CONTINUED**
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3 **Claim 9 (currently amended)** A spring mechanism assembly as
4 defined in claim 7, in which said means for securely attaching said
5 top end of said elastic spring means comprises:

6 a yoke assembly securely holding said top end of said elastic
7 spring means, said yoke assembly being inserted inside through said
8 longitudinal opening and securely attached at its bottom to said
9 inner surface of said side member.
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1 **C. AMENDMENTS TO THE CLAIMS - CONTINUED**

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3 **Claim 10 (new)** A spring mechanism assembly as defined in claim 7

4 in which said effective tensile strength of said elastic spring means

5 is about 165-185 lbs., and said effective load capacity of said

6 elastic spring means is up to about 340 lbs.

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